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Growing Globally: Is it reasonable for Logoplaste to enter the Colombian rigid plastic packaging market?

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Abstract

With this project my main goal is to understand which internationalization opportunities still exist for Logoplaste and more precisely name a country where I believe this company's business model may work.

I began with a deep analysis on the company, its business model, research on where it succeeded and why. Afterwards, I supported the gathered knowledge with some theoretical concepts. At this point, I decided to explore the concept of strategic outsourcing and modularity. Additionally, I chose to refer to a couple of commonly known frameworks such as *Porter's Generic Value Chain* and the *VRINO Framework* as well as to a couple of theories, namely the *Transaction Cost Theory* and the *Resource Based View*.

Once all Logoplaste knowledge was gathered, it was time to analyze the potential internationalization opportunities: China, Colombia, India, Indonesia, Peru, and Turkey. During this phase, in addition to an extensive research of macroeconomic indicators I also resorted to Ghemawat's famous CAGE model to help me narrow down the various hypotheses. I was then finally able to conclude that Colombia seemed an attractive market.

It was now necessary to analyze Colombia with more detail and therefore I used a *PESTLE analysis* to get a better idea of this country's macro-environment. A *SWOT*



analysis and a *Porter's five forces analysis* followed with the aim of understanding how could Logoplaste fit in this country. To finalize, I described briefly the overall implementation procedure including a listing of the major costs incurred in, if Logoplaste decided to move forward with this project in Colombia.

Company

Logoplaste, founded back in 1976 by Marcel de Botton, is a renowned producer of rigid plastic packaging that revolutionized the industry by introducing its *hole-in-the-wall* concept: set-up of single-client plants tailored to client's needs, located inside their existing infrastructures. Although this imposes a limit in the production scale, it makes it possible for Logoplaste to deliver on a *just-in-time* basis and to integrate its customer's supply chains. This way Logoplaste is able to overcome its scale disadvantage by basically eliminating transportation costs.

Regarding Logoplaste's business model, it proves to be a successful one but heavily reliant on trustworthy, lasting and stable relationships with its clients. A new customer represents a huge initial investment, the need to set up an exclusive new plant, thus Logoplaste expects long-term relationship as a means to obtain return.

Recognizing that relationships were key to the overall business model Logoplaste decided to target the so-called blue-chip companies¹. By pursuing this strategy, Logoplaste rapidly became a known global partner among large multinational fast-moving consumer good (FMCG) companies: Coca-Cola, Procter & Gamble, Heinz, Unilever, among many other powerful players within this industry.

The company's tremendous success during the early nineties in Portugal made internationalization the only viable option in order to keep growing. With a clear strategy designed, with the desire to grow with its clients and to become global step by step, Logoplaste has grown from a local rigid plastic packaging producer in Portugal to a major player within its industry worldwide. Nowadays the company owns already 60 factories, more than 350 machines and is present in 16 countries².

¹ Alcacer, J., & Leitao, J. (2010). *Logoplaste: Global Growing Challenges*. HBS No. 9-711-411. Boston, MA: Harvard Business School Publishing

² www.logoplaste.com



Strategic Outsourcing and Modularity within the Production Process

Strategic Outsourcing

Numerous companies worldwide have been recently persuaded by a new trend known as, outsourcing. Such initiative may enhance several benefits: saving costs, access to external expertise, increased flexibility, and access to new processes. But besides some benefits, outsourcing carries certain risks: high dependency on the outsourcer, and the risk of poor quality of the service provided, which has the power to depreciate the image of our company. However, according to Manuel Ferreira and Fernando Ribeiro, we should keep in mind other factors when deciding to outsource or not a certain activity/process: the maturity of the industry in which the company operates, the transaction risks and costs involved, as well as the resources the firms hold.

The global container and packing industry has already reached billions of sales. Among this industry, plastic has become progressively more common due to developments in plastic technology which lowered its cost. Such popularity has been traduced into a high volume of sales, making this industry a quite mature one. According to the authors, “firms in mature industries are more likely to use outsourcing models than maintain activities in-house”³, because, typically, the company’s ability to sustain a competitive advantage lies within its intangible assets (e.g. knowledge) and on-customer oriented strategies rather than in the control of the manufacturing process.

Another factor these authors point out is related to the transaction costs theory: firms should internalize activities when the transactional risks are high, regardless of the strategic importance of the activity and outsource when the risks are low. Regarding transaction costs incurred by Logoplaste’s clients, these are low: it is not possible for Logoplaste to integrate vertically downwards; the packaging industry is quite fragmented which forces prices to remain competitive; exchanges with a firm like Logoplaste are likely to be extremely beneficial for the clients, since Logoplaste is able to eliminate transportation costs, supply uncertainty, avoid multiple market recruiting and contracting, as well as promote communication and information flows which encourage joint innovative potential. The result is strong and lasting relationships built upon trust, cooperativeness and stability which diminish the chances of opportunistic behaviors and thus lower the perceived transactional hazards.

³ Ferreira, Manuel Portugal and Serra, Fernando A. Ribeiro “Make or Buy in a Mature Industry? Models of Client-supplier Relationships under TCT and RBV Perspectives”, Brazilian Administration Review (BAR);Jan2010, Vol. 7 Issue 1, p22



A different yet significant theory the authors refer to is the Resource Based View: value creation comes from a few VRIN resources that the company holds and develops in order to achieve a sustainable competitive advantage. They believe that firms in mature industries are more likely to outsource activities of low strategic importance and internalize the ones which the firms hold superior resources to perform them. With regards to this theory, Logoplaste was able to create an excellent and unique business model based on its VRIN resources, like: the ILab, the extremely low or even inexistent transportation cost, and the high quality of the service provided.

To conclude, it is easily perceived that both theories clash to a certain extent, making me believe that these should be faced as complementary theories however not offering a unique explanation for how firms should be organized in all situations.

Modularity

Modularity consists of a way for organizing the design, production and distribution of complex products and processes (Baldwin and Clark, 2000), which is becoming more important as a strategy for organizing systems efficiently. Modularity makes complexity something manageable, because although designed independently, modules can still function as an integrated whole⁴.

Today's increasing complexity of organizational processes across the supply chain demands for an organizational skill to coordinate the resulting interdependences. By doing so, this will enable more and better communication between supply chain partners as well as increased overall process efficiency.

When analyzing Logoplaste we are in the presence of a case which illustrates modularity and interdependencies in operational processes instead of product modularity. It is easy to see that Logoplaste has a quite complex productive system since its activities range from production planning, scheduling, material management to material delivery activities. Such diverse panoply of activities that go beyond exclusive production actions, make Logoplaste's overall system a complex one that requires modularity. The resulting structure is not 100% modular, the sub-systems group activities which require high levels of interaction among them, however interactions between modules still exist. Each one of these sub-systems then has its own pattern of interdependencies and strives to reduce transaction costs and increase flexibility

⁴ Gomes, Paulo J., and Sonia Dahab. "Bundling Resources across Supply Chain Dyads: The Role of Modularity and Coordination Capabilities." *International Journal of Operations & Production Management* 30.1 (2010): 57-74



whenever possible. The major reason behind a solely partial modular structure is related to the fact that Logoplaste needs to merge its activities with its clients' ones.

Although these modular structures carry along various benefits there exist also a couple of downsides to modularity. A typical example of that is the difficulty that may emerge when trying to adapt the supply chain to changes in the market. Downsides like this one affect Logoplaste since regular product adaptations within the plastic industry demand for new product specifications and renewed investments in molds which must be presented promptly in order to meet the final customers' needs.

To wrap up, modularity is a concept that emerges as an attempt to facilitate the organization of complex systems. Moreover, the design structure matrix is a precious tool that enables a proper understanding of the system. When it comes to system modeling it is key since it allows for the system's decomposition and it analyzes the need for system integration. By doing so, it is possible to spot interdependencies and understand how these influence the overall system and consequently set the appropriate coordination mechanisms.

Logoplaste's Value Chain

Logoplaste's strategy is to integrate its client's value chains, based on a process of partnership developments, the investment in R&D of packaging engineering, and on a production process grounded on a *hole-in-the-wall* business model.

Hence, Logoplaste's value chain (appendix 1.1) can be described as a so-called modular value chain, characterized by making products and providing services according to customer's specifications. Based on the modularity of the packaging process within the client's value chain, Logoplaste attempts to maintain switching costs high due to transaction-specific investments, which diminishes the overall complexity of the interactions. Furthermore, this type of value chain is characterized by strong linkages due to the high volume of information flowing across both firms involved, in the specific stage of the client's product packaging, integrating services of total quality management and innovations.

I will now use Porter's Generic Value Chain (appendix 2.1) to better explain how the overall chain functions. To begin with, Porter considers that all firms have two distinct types of activities across their value chain: primary activities and support activities.

Starting off with the primary activities, regarding inbound logistics, Logoplaste is mainly concerned with material handling, raw material purchases and transformation, in



the sense that raw materials arrive in granulated format that needs to be melted before converted into the various final packages.

Concerning operations, these are core among Logoplaste's technical competences. On the one hand it demands for process efficiency (e.g. operating machinery to its adequate potential; minimize the scrap ratio) and for an appropriate equipment choice while determining a minimum amount of buffers as a way to avoid any potential contretemps. On the other hand, it requires a superior know-how of Logoplaste's people, a multi-task team, capable of performing activities ranging from quality control to the elaboration of KPI reports. Furthermore, Logoplaste carries out a lot of preventive maintenance in order to achieve above average efficiency levels, to guarantee quality standards, and to avoid large penalties if it doesn't deliver within the appropriate conditions (e.g. quality, time) to their clients.

The outbound logistics, given the modularity of the process, aren't typically Logoplaste's responsibility, thus it attempts to eliminate or at least minimize them. These logistics are typically associated with finished goods warehousing which doesn't make much sense within a company that operates on a *just-in-time* basis; and delivery vehicle operations that are almost inexistent within the company since the great majority of the plants are located next to the clients and only a few are *near-by plants* which require some transportation.

With regards to marketing and sales, at Logoplaste there aren't specific people performing these activities, on the contrary these are included within the Regional Managing Directors' responsibilities or the Key Accounts' which are constantly spotting opportunities. Operating in a B2B environment, advertising is basically inexistent, however Logoplaste has been recently investing part of their resources developing 3D plant design, as an instrument to attract new clients. Moreover, the company attempts to promote itself through the pitches given to their clients and through the on-going client reviews. In addition, within the area of Marketing, the Innovation Lab (ILab) plays a crucial role, functioning as an exposure tool, since Logoplaste gets the opportunity to work alongside non-partner companies. Regarding sales, Logoplaste has developed a department, exclusively dedicated to contract analysis, pricing calculations, negotiations, among other relevant issues on a sales perspective.



Finally, service isn't a core activity pursued by Logoplaste, however the company tries to meet with plant managers on a regular basis to ask feedback about the process, and to be aware of clients' needs and satisfaction levels.

Moving on to the support activities, concerning procurement Logoplaste has chosen to centralize certain purchases namely the ones related to office equipment and "spare parts" of the machines.

With regards to Technology Development, primarily Logoplaste aims to improve the overall management of its clients' plants, by guaranteeing a just-in-time delivery, stock reduction as well as an overall simplified logistics. Furthermore, Logoplaste assumes full responsibility for the management of raw material purchases, eliminating certain risks to clients which can focus solely on their core business. Moreover, packaging unit management is also carried out by Logoplaste, meaning once again that its clients do not have to worry with issues related to reducing consumption, equipment selection, human resources (HR), equipment maintenance, among others.

With respect to HRM, Logoplaste strives to assure that everyone within the plants has the required know-how and skills to make facilities work to full potential and with maximum efficiency. The company has also created an international team exclusively dedicated to the start-up of new projects, which reveals the company's great concern on knowledge-sharing. Moreover, Logoplaste carries out the typical basic training programs intended to prepare employees for a new function, which evidence the company's preference for internal recruitment. The reason behind such preference is linked to the importance culture plays and the ease of spreading and strengthening it by simply retaining existing personnel and moving them around.

Regarding the Firm Structure, Logoplaste has decided to have the major headquarters in Cascais where it has centralized everything related to control management, accountability, treasury, IT, industrial benchmarking department, among others. In certain countries, Logoplaste opted to set up "mini-headquarters" due to cultural and taxation barriers (e.g. Russia). The legal activity is always outsourced. Within this category Logoplaste places a special importance on quality management since it is one of the company's core competences, however it isn't centralized because quality standards differ slightly from client to client.

Here we may include the flow of information happening between the various units: the transfer of technology from headquarters to subsidiaries and vice-versa; from the ILab



to the clients; and the transfer of the corporate culture among the employees across the various plants worldwide. In order to encourage this, Logoplaste promotes a sense of uniformity via: monthly newsletters containing news about all plants around the globe; forums (appendix 2.2) which gather Logoplaste people from diverse locations and areas; and the internal recruitment and rotation of employees across functional areas. The flow of information happening around the ILab is very little because this unit works with very unique, distinctive and independent projects from one another. However, every year there is an ILab Event which brings together the laboratories' clients as well as outside speakers, to talk about innovation and share ideas.

Logoplaste's Competitive Advantages Worldwide

"Competitive advantage grows fundamentally out of value a firm is able to create for its buyers that exceeds the firm's cost of creating it."⁵ Associated with the concept typically comes the idea of unique resources, which must match either the VRIN acronym or the VRIO one – Valuable, Rare, Inimitable, Non-tradable or Organizational. It is still possible to consider a third acronym which results from the combination of both: VRINO.

Accordingly to Collis & Montgomery⁶, resources are all the assets, skills and capabilities a firm holds, which become crucial when designing the company's strategy. Additionally, these are a powerful source of orientation since they draw a clear line between what the firm wants to do and what it is actually capable of doing. It is a firm's own set of resources that determines its competitive advantage and that will ultimately distinguish one firm from another. In order for a firm to achieve competitive advantage it is necessary that its strategy fits its unique resources. Logoplaste was able to achieve it through the implementation of unique business model based on: the *hole-in-the-wall* concept; the establishment of strong partnerships; continuous investment on its people; and constantly providing innovation via its single and distinctive Innovation Lab (ILab). However, it is important to differentiate between two types of competitive advantage: cost advantage, consisting of a company's capability of producing a good/service at a lower cost than its competitors; and differentiation advantage, which results for a company's ability to provide a product/service which is perceived as different and the

⁵ Porter, Michael E. *Competitive Advantage: Creating and Sustaining Superior Performance*. New York: Free, 1985

⁶ Collis, David J., and Cynthia A. Montgomery. *Corporate Strategy: A Resource-Based Approach*. 2nd ed. Boston: McGraw-Hill/Irwin, 2005



best alternative. Note that a competitive advantage may be simultaneously a cost and a differentiation advantage; and that nowadays it is no longer enough to attain competitive advantage, it is necessary that a firm has the capacity to sustain it.

One of the key success factors of this business model is linked to the partnerships established, a source of value added for all clients. For Logoplaste a new partnership means sharing its partners' objectives and "merging" professionals from both sides to function as a single unified team. However, none of the parties give up on their personal and independent relationships. Moreover, these partnerships aim to go beyond mere buying-selling relationships and actually intend to generate strong, lasting and stable relationships, which are only possible through "win-win practices" (e.g. transparent price-policies, and decisions of joint growth with the partner).

Another trait of this model is related to the *hole-in-the-wall* concept: valuable since Logoplaste is able to eliminate transportation costs while responding in a personalized way to each client; rare, since the majority of rigid plastic packaging producers use off-site production and just a minority adopts a mix approach of on-site and off-site plants; non-tradable once it is embedded in the company's culture; however, it doesn't meet the inimitability condition because there exist other producers worldwide which have adopted this approach.

An additional important and distinctive aspect of this business model is the emphasis on service. Logoplaste is nowadays offering its clients a fully integrated service ranging from package development and production aligned with a set of pre-requisites presented by the client, to integrated JIT production quality control and technical consultancy. Logoplaste does this by guaranteeing the use of state-of-the-art technology, by delivering high quality, and by creating the Innovation Lab (ILab). The Innovation Lab (ILab) is clearly a VRINO resource, the company must hold tight to: valuable since all clients perceive it as a value adding service; rare once the majority of competitors have not invested in such type of initiative; non-tradable, organizational, and inimitable because even if competitors begin to pursue this type of initiative they will never acquire an Innovation Lab with the exact same characteristics as Logoplaste's one.

Moreover, Logoplaste is cautious when choosing which "departments" to centralize and which to decentralize locally. Hence, Logoplaste has decided to keep package development and production as well as research and management, centralized at the main office as a way to maintain an on-the-spot, agile and fast operational structure.



However, Logoplaste maintains local multi-skilled management teams in charge of each plant individually.

Furthermore, within this business model Logoplaste assumes full commitment regarding the large initial investment involved in the setting up of the plant: specialized machinery, plant equipment and utilities. By doing so, Logoplaste is providing its clients with a great advantage by enabling them to focus exclusively on their core businesses without having any extra concerns.

To wrap up, it is possible to argue that Logoplaste's overall business model benefits from both a cost and a differentiation advantage. On the one hand, it attains a cost advantage by placing a customized plant within the client's infrastructures which enables it to basically eliminate transportation costs. On the other hand, via VRINO resources like its Innovation Lab and Logoplaste's capability to build strong and lasting relationships with its clients, the company is able to create value added for all parties involved via a differentiation approach.

Where should Logoplaste go?

Logoplaste is today present in 16 different countries, however there are still some places where the companies hopes to establish its presence. As a result, Logoplaste challenged us to choose among six potential future destinations (China, Colombia, India, Indonesia, Peru, and Turkey), the two most viable ones and to justify our choice.

We began by doing a careful analysis on Logoplaste to understand the business model, in which countries it was successful, what growth strategies it pursued, among other topics which helped us get an overall insight of the firm's structure and how it operates. During this process, we had the opportunity to contact directly with people from Logoplaste which were able to give us some precious and trustful information.

During this initial phase, we began by slowly crossing out China and India. The first and most significant reason for this, is that we are standing before two massive markets with a population of 1 354 million (China)⁷ and 1 205 million (India)⁸, which demand for multiple competitors. Some of them have already a strong and well-established position within the industry, which makes it hard for Logoplaste to enter with a competitive and sustainable position.

⁷ Bes Research (2013), China - International Support Kit of Opportunities [pdf slides], Retrieved from <http://www.bes.pt/sitebes/cms.aspx?plg=9f79b1b4-c2cc-4196-a92a-baa15458028f>

⁸ Bes Research (2013), India - International Support Kit of Opportunities [pdf slides], Retrieved from <http://www.bes.pt/sitebes/cms.aspx?plg=940e5c25-9c95-4eca-9a0f-48663af670c1>



Moreover, within the plastic packages, flexible packaging plays a much more significant role than rigid in both markets. Such fact is linked to the high level of poverty and the preference of unidos recipients over the larger rigid containers. Additionally, flexible plastic enables the use of less packaging materials, less storage space is required, there is less solid waste, lower shipping costs, which consequently make it both a cheaper as well as a more environmentally friendly option.

Recently China has experienced a tremendous fast development within the packaging market. However the plastic packaging industry concentration is not very high, meaning, there exist many plastic packaging manufacturers but mostly with small scale, with product homogeneity, excess capacity and lack of competitiveness⁹. The major competitors represent a very small percentage of the overall market share: HuangShan Novel Co. Ltd; Shanhai Zijiang Color Printing & Packaging Co. Ltd; VPS Propack Beijing Co. Ltd; Graham; among others. Additionally, these companies' customers are FMCG companies like Nestle, Unilever, P&G, Kraft and Danone, Logoplaste's partners within other markets.

In India the situation is quite similar. India is also among the largest packaging markets in the worlds and it is expected to keep growing and become the fourth-largest packaging market by 2016. Despite this consolidation, the Indian packaging industry is still quite fragmented, with many new companies emerging. The major players are Manjushree Technopak and Graham Blowpack Pvt Ltd. Both well-established manufacturers which have developed strong relationships with FMCG companies like: Unilever, Coca-Cola, Heinz, Kraft, P&G, Nestle, and Henkel; again Logoplaste's existing clients in other markets, making it harder for Logoplaste to step in.

Moreover, Logoplaste isn't able to compete with the extremely competitive labor costs practiced in such countries nor is it able to benefit from the massive economies of scale due to its business model. Therefore, the hole-in-the-wall concept proves to be a challenging one to implement in huge markets like China and India which demand for an enormous production capacity.

Furthermore, Logoplaste mentioned that the cultural differences associated with these two countries, lead to multiple clashes and problems which make Logoplaste believe that these markets aren't still prepared for their business model.

⁹ <http://www.researchmoz.us/global-and-china-plastic-packaging-industry-report-2013-2015-report.html>



Once these markets were “excluded” from our of options, it was time to address the remaining four: Colombia, Indonesia, Peru, and Turkey. We began by taking a look at their economic context, analyzing their business environment and some microeconomic indicators. However, this procedure didn’t lead us to very concrete conclusions. As a result, we decided to develop a **CAGE model** (appendix 2.3) to help us make the correct choice. Ghemawhat attempts to understand the various degrees of difference, instead of adopting the common-sense approach of similarities vs. differences. He does so by modeling differences in terms of the distances between countries along a variety of cultural, administrative/political, geographic and economic (CAGE) dimensions.

CAGE Analysis

Thus, we proceeded with a CAGE analysis economy wide since it wasn’t possible to develop a specific plastic industry analysis, to complement our more generic analysis about the remaining four options. Ultimately, we were able to conclude that the best two countries for Logoplaste to enter were: Colombia and Turkey. (appendix 1.2 & 2.4)

Home Country	Target Country	CAGE Distance
Portugal	Turkey	3210
Portugal	Colombia	7885
Portugal	Peru	9170
Portugal	Indonesia	13658

Source: CAGE comparator

Colombia becomes closer to Portugal due to its Iberian culture heritage. On the one hand, although there isn’t an exact language match, the truth is that Portuguese and Spanish are quite similar languages which will facilitate communication and the ease of doing business. On the other hand, Colombia pursues a Catholic religion just like in Portugal, where church played an important role from early on. Furthermore, even though it isn’t an ex-Portuguese colony it was a Spanish one and it is geographically close to Brazil (one of Portugal’s greatest colonies), therefore it is natural that Colombia inherited many customs and traditions from the Iberian countries. Additionally, Colombia has one of the most liberal parties of Latin America in power and the FARC’s drug traffic has been diminishing¹⁰, which contributes towards a quite stable political

¹⁰ <http://www.economist.com/news/americas/21582305-these-are-what-left-most-needs-peace-and-brotherly-love>



environment. And, recently this country has also been receiving a lot of Portuguese investment which can have a positive impact in lowering the level of risk attributed by banks to invest in this country.

PESTLE Analysis

Political

Colombia's politics unfold within a quite stable democratic republic. Today's political party in power is one of the most liberal ones among all Latin America and FARC has been progressively losing its influence. Under the presidency of Alvaro Uribe (between 2002 and 2010), the country was able to reduce crime and violence, while increasing the government control of the national territory and re-establishing business confidence. With the election of President Juan Manuel Santos in June 2010, the country concentrated its efforts in promoting its strategic position within the global economy through the reinforcement of trade relations as well as the increase of foreign investment¹¹.

Moreover, the government has also been able to drive down the levels of drug traffic and to progressively fight against the still existing guerilla movements and criminal groups which end up risking the overall security¹². Nonetheless, despite improvements in fighting drug traffic and corruption, Colombia remains linked to high levels of corruption, which in then affects the reliability and impartiality of the police, the military, the judicial system and other government offices¹³.

The positive side to Colombia is that, unlike many other countries, the current government is aware of the challenges the country continues to face and is addressing them seriously (appendix 2.5).

Economical

To begin with, Colombia has an extremely attractive business environment. This country has been able to strengthen its macroeconomic variables while having a dynamic economic performance, which enabled it to double its GDP per capita over the last 10 years¹⁴. Additionally, Colombia has an impressive domestic market, being the 23rd most populated country of the world and the second most populated country within the Spanish-speaking community¹⁴.

¹¹ <http://www.heritage.org/index/country/colombia>

¹² <https://economics.rabobank.com/publications/2013/june/country-report-colombia/>

¹³ http://www.ehow.com/list_6740741_risks-doing-business-colombia.html#ixzz2j6PC9py8

¹⁴ <http://www.investincolombia.com.co/why-colombia.html#attractive-business-environment>



Moreover, the three largest international rating agencies (Standard & Poor's, Moody's, and Fitch) have raised Colombia's rating¹⁵, confirming the country's investment grade status and making it a reliable partner. Nonetheless, Colombia is highly dependent on oil exports, making it quite vulnerable to falls in the oil prices.

Unquestionable is this country's active role within the global market. Colombia maintains a series of trade relations, exporting to 181 countries with more than 9,700 exporter companies¹⁶. Concerning the country's exporting profile we can easily identify that Colombia's leading export product is oil and oil derivatives which accounted for 50,1% of the total of goods exports in 2012, followed by coal (12,4%), gold (5,7%), coffee (3,3%) and flowers (2,2,%)¹⁵. Moreover, it possesses a strong international integration with its various trade agreements: CAN-Andean Community; ALADI-Latin American Integration Association; SELA-Latin American and the Caribbean Economic System; and FTTA-Free Trade Area of Americas. The desire to strengthen these trade relations as well as increase foreign direct investment (FDI) was reinforced with the Santos Administration's foreign policy (appendix 2.6).

Before wrapping up the economical section, I believe it is essential to quickly analyze Colombia's industry structure. On the figure represented on appendix 1.3 we have represented the break-down of Colombia's 2012 GDP by sector; we can see that the service sector accounts for more than 55% of Colombia's GDP.

If we look into the plastic industry specifically we can conclude that the Colombian plastic market has still a lot of potential: between 2008 -2012, the industry has been growing at a CAGR of 6%, which enabled it to reach a market value of approximately 3.5 billion US dollars; plastic production goes beyond 1 million tons per year; and the plastic industry is expected to keep on growing during the upcoming years due to the continued expansion of plastic-dependent industries like consumer goods, construction or agriculture¹⁷. Furthermore, I think it is important to add that according to Acoplasticos, the main sectors demanding plastic in Colombia are: packaging and containers (54%); construction (21%); agriculture (9%); and institutional (8%).

Regarding the overall packaging industry, the Colombian is considered a dynamic one since product manufacturers continue to invest a lot in new product development.

¹⁵ Bes Research (2013), Colombia - International Support Kit of Opportunities [pdf slides], Retrieved from <http://www.bes.pt/sitebes/cms.aspx?plg=a64af9b4-49c8-42af-9a9b-6df06a5ec2f4>

¹⁶ <http://www.investincolombia.com.co/why-colombia.html#attractive-business-environment>

¹⁷ <http://en.investinbogota.org/plastics>



However, it is unquestionably a competitive industry with approximately 3332 containers and packaging producers in Colombia which offer primarily plastic packaging, corrugated carton, and metal packaging among others¹⁸.

Social

When analyzing socially Colombia, it is important to understand how the population is distributed across the territory. Once the most populated areas are identified, it is necessary to analyze how the GDP is distributed across these areas in order to understand which are the wealthiest regions. This procedure is key to find out in which region Logoplaste should place its plant, if it were to enter the Colombian market (however always keeping in mind the “limitation” imposed by the *hole-in-the-wall* concept which requires the plant’s physical proximity).

The territorial distribution of Colombia’s population is strongly influenced by the country’s geography, geo-historical processes and socio-economic dynamics¹⁹ (appendix 2.7). Bearing such factors in mind we can identify that: the center and west of Colombia are highly populated, whereas the eastern part of the country is sparsely populated. From the observation of the cartogram on appendix 1.4, we can infer that the largest concentration of people happens in the Andean region in cities like Bogota, Cali and Medellín as well as in the Caribbean region in cities like Barranquilla, Cartagena and Santa Marta. In contrast, the regions the least populated are Orinoquía and Amazon. If we were to break-down Colombia’s GDP (2011) by state, by analyzing appendix 1.5, we can promptly identify that the seven states discriminated in the graph account for more than two thirds of the country’s GDP. Therefore, it may not be a bad idea for a new company which is willing to expand its presence to the Colombian market, to begin by entering one of the following states.

Regarding labor force, human capital is considered one of Colombia’s major assets. Nowadays Colombian workers are considered among the best in Latin America within the fields of management and operations. Such positive critics on the Colombian work force may be explained by: the expansion in the coverage of education; the existence of seven Colombian universities ranked among the best worldwide; the large number of students (>200,000) graduating every year from higher education²⁰. As a consequence,

¹⁸ <http://fta-us.proexport.com.co/offer-by-sector/manufacturing-and-supplies/packaging-and-containers-industry-colombia>

¹⁹ <http://sige.dane.gov.co/atlasestadistico/>

²⁰ <http://www.investincolombia.com.co/why-colombia.html#skilled-labour>



the country was able to rank number 35 in economic performance and 40 in overall competitiveness by the World Competitiveness Yearbook 2010²¹ and according to the 2012 IMD Workforce Growth Rate it is amongst the group of countries with the largest annual increase in availability of human resources²².

Technological

Regarding the technological factors, when analyzing a manufacturing company like Logoplaste, it is crucial to gather information on the following aspects: the energy sector and the cost of energy, Colombia's industrial infrastructures and how developed are the logistics in the country.

Colombia's progress concerning technological development has been unquestionably limited. In addition to weak science and technology infrastructure, this country has been spending very little on R&D (approximately 0.3% in contrast with the desired level of 1% of GDP proposed by the OECD)²³.

Concerning the country's energy sector, it is widely known that Colombia holds a great amount of minerals and energy sources. Its electricity sector is fuelled by either large hydropower generation or thermal generation. This sector obeys to a system of cross-subsidies linked to the inequalities in terms of the level of wealth by area and the levels of electricity consumption; and has regulated and non-regulated segments. The regulated market comprises all the industrial, commercial and residential users that demand power under 0.5MW, which is supplied by the distribution companies. The non-regulated market encompasses all the consumers which demand 0,5MW or more of power, which can either negotiate and contract directly in the wholesale market or via commercial entities, distributors, or producers²⁴.

With regards to energy prices, which I believe is something crucial to analyze when considering opening a plant in a new country, the prices of electricity in Colombia vary slightly according to the regions but overall have been increasing across all regions. Within the industrial sector, prices have increased a lot since 2001, having quadruplicated by 2011 (US\$0.17 per kWh)²⁵.

²¹ <http://fta-us.proexport.com.co/offer-by-sector/manufacturing-and-supplies/packaging-and-containers-industry-colombia>

²² <http://www.investincolombia.com.co/why-colombia.html#skilled-labour>

²³ <http://pt.scribd.com/doc/43950986/Colombia-Monitor-PESTLE>

²⁴ www.esmap.org

²⁵ <https://estore.enerdata.net/energy-market/colombia-energy-report-and-data.html>



Concerning infrastructures, Colombia is still lacking some and the existing ones are many times not developed enough. Therefore, it becomes crucial that the country takes advantage of this prosperous economic growth to develop its infrastructure specially the ones related to transportation. It was mentioned in *The Economist* that “moving goods from inland cities to a port can be more expensive than shipping them from the port to a market halfway around the world”²⁶. This fact clearly shows the need to expand, invest and develop the existing infrastructure.

Legal

Colombia is considered to be an investor-friendly country. The government is committed to providing incentives for investments as well as stability to investors. For example, as a means to attract foreign investment: back in December 2012, the government launched a new tax reform which aims at reducing the burden faced by entrepreneurs by lowering the cost of hiring workers; and in the 2010-2014 National Development Plan, the government introduced a formalization and job creation law with the objective of promoting the entry of small and medium-size enterprises and job creation²⁷.

Moreover since 2005, the Colombian government has been striving to improve the country's regulatory environment by: strengthening its policies and institutions; increasing productivity; accelerating economic growth; and promoting competitiveness. Over these last eight years, the country has also carried out 25 business regulatory reforms and has made efforts to develop information technologies, with the objective of making transactions more efficient and less costly²⁷. Additionally, it is known that the country has an extensive range of free trade zones, which facilitate and encourage transactions.

Colombia's government is also committed to development, demonstrated with the creation of a national development plan which aims at addressing Colombia's primary needs and implementing an action plan to achieve continuous growth and competitiveness. Furthermore, the country has launched the Production Transformation Program (PTP) which promotes not only productivity but also the competitiveness of the most attractive exporting sectors, via a more efficient coordination of private and

²⁶ <http://www.economist.com/node/21529036>

²⁷ <http://www.doingbusiness.org/~media/GIAWB/Doing%20Business/Documents/Subnational-Reports/DB13-Colombia-Overview.pdf>



public sectors²⁸. Ultimately, such initiative, aims to triple exports by 2014 in 12 economic sectors²⁹.

Environment

With regards to Colombia's major assets, we can promptly identify a great variety of natural resources, including oil, gas, coal, emeralds and metals (namely gold, silver and copper). In addition to these we may include agricultural crops (since agriculture together with forestry and the fishery sector still account for a considerable part of Colombia's GDP – in 2012 these represented 6,9% of the total GDP²⁹) such as coffee, sugar cane, bananas, corn, tobacco, cotton and flowers. Moreover, the population is very environmental-conscious, potentially threatening the rigid plastic industry, due to a preference for more eco-friendly packaging solutions.

Porter's Five Forces

When attempting to formulate any strategy, in this specific case an internationalization strategy, it is crucial to understand competition and be able to cope with it. The configuration of Porter's five forces differs by industry. The strongest competitive force or forces determine the profitability of an industry and become the most important for strategy formulation. I will now analyze each one of them carefully, as a way to get a better overview of the rigid plastic packaging industry in Colombia.

Suppliers

In the process of plastic package production, the main inputs involved are: plastic pellets, machines, energy, and labor³⁰. Among these four major outputs, typically the plastic pellets represent the greatest cost. Usually, these are provided by very large petrochemical companies that sell them on the open market, priced by ton. The enormous dimension of these companies and the importance of the product they provide for the packaging manufacturers, enables them to have a huge power over these producers. However, Logoplaste attempts to minimize their power by centralizing the purchase of its raw materials, meaning it buys in larger quantities which enable the company to acquire better prices.

²⁸ <http://www.investincolombia.com.co/why-colombia.html#the-government-s-commitment-to-development>

²⁹ Bes Research (2013), Colombia - International Support Kit of Opportunities [pdf slides], Retrieved from <http://www.bes.pt/sitebes/cms.aspx?plg=a64af9b4-49c8-42af-9a9b-6df06a5ec2f4>

³⁰ Alcacer, J., & Leita, J. (2010). *Logoplaste: Global Growing Challenges*. HBS No. 9-711-411. Boston, MA: Harvard Business School Publishing



Regarding machinery, these are provided by many small to medium-sized manufacturers⁴¹ which immediately reduces their power due to the existence of various competitors and their smaller scale. Moreover, contrarily to raw materials, machines are something you don't need to be constantly purchasing and additionally Logoplaste takes special care for its machines making them undergo constantly preventive maintenance to avoid massive penalties. As a result, due to the combination of both these factors, I would consider that the overall supplier power is moderate-low.

Rivalry

Concerning the level of rivalry within the industry, I would consider it high: there are many powerful manufacturers within the plastic packaging industry and the level of differentiation is quite low making price a key criterion for FMCG companies. Moreover, mergers and acquisitions are a reality within this industry, therefore it is more and more common the creation of huge players with the capacity to achieve impressive economies of scale and extremely competitive prices.

Colombia has already a good range of strong competitors in the rigid plastic packaging segment: *Mexichem*, *Grupo Phoenix*, *Carvajal Empaques*, and *Amtor* (appendix 2.8). Nonetheless, I think it is important to highlight that *Carvajal Empaques*, represents the biggest rival since both companies operate in the exact same market. Additionally, this company has established relationships with firms like, Johnson & Johnson, Nestlé, Reckitt Benckiser, Unilever, Henkel, and P&G (Logoplaste's partners in other markets), making it harder for Logoplaste to penetrate the Colombian plastic packaging market.

Threat of substitutes

In my opinion, the threat of substitutes within the plastic packaging industry in Colombia is quite high. On the one hand, in Colombia, product presentation doesn't seem to assume a great importance among the end-consumers. These consumers are more interested in acquiring good quality products at lower prices. Thus, they are expecting simple packages which solely guarantee the safety and quality of the product, being design shifted towards second plan³¹.

On the other hand, Colombians seem to be quite environment-conscious. Being Colombia known for its wide variety of natural biodiversity, many companies alongside Cámara de Cosméticos y Aseo de la ANDI, have been looking for natural raw materials which would enable the development of 100% environmentally friendly packages. If the

³¹ <http://www.euromonitor.com/packaging-industry-in-colombia/report>



desired outcome is achieved, rigid plastic container manufacturers will be definitely in risk.

Moreover, flexible plastic packaging has already penetrated the Colombian market and it looks like it will continue to expand. Not only is it cheaper than rigid plastic but also it is more environmentally friendly, enabling landfill waste reduction as well as the reduction of GHG (greenhouse gas). Nowadays the major players within this segment, which may represent one of the biggest threats for rigid plastic container manufacturers are: *Flexo Spring* and *Plastilene*³² (appendix 2.9).

Buyers (customers)

When analyzing the plastic packaging industry, we can identify the buyers/customers as the FMCG companies which tend to outsource their package production due to the costs involved and potential efficiency improvements. Concerning the buyer's power it is hard to classify it, because there are factors that contribute towards their empowerment whereas there are other which weaken their overall position. Thus, I would consider they have a moderate power.

On the one hand, Logoplaste's business model of setting-up of a unique plant tailored to the client's specific needs, indirectly hands a superior power to the client. Moreover, switching from package supplier may be extremely costly due to the risks involved for the FMCG companies, which will only do so if the new supplier guarantees quality standards and a significant higher value, thus empowering buyers once again.

However, on the other hand it is known that FMCG companies need to assure consistent and perfect quality packages, as a means to protect their brands (one of their most valuable assets). Additionally, these companies also need to guarantee on-time deliveries due to the high cost of supply chain disruptions and heavy penalties imposed by retailers on delay. This high dependency on packaging with the need of having products exposed on the shelves meeting all the standards of quality and available to end-consumers, empowers the packaging manufacturers, without whom these FMCG companies wouldn't be able to meet all the requirements.

Furthermore, the type of contracts that Logoplaste forms with its clients (buyers) reduces the clients' power. Firstly because being long-term contracts, these institute lasting partnerships for several years and secondly because by establishing that the

³² <http://en.investinbogota.org/plastics>



client must pay a premium price if it decreases the volume of its orders, Logoplaste is able to reduce its risks as a producer of packages for each one of its clients.

Regarding concretely some of Logoplaste's existing clients, these are already in the Colombian market being supplied by various companies. As I mentioned above, companies like Johnson & Johnson, Nestlé, Reckitt Benckiser, Unilever, Henkel, and P&G, are currently provided by *Carvajal Empaques*, which seems to be well established within the Colombian market. Moreover, companies like Coca-Cola are being strongly supplied by FEMSA which has recently been concentrating its efforts to open a new plant in Tocancipá in order to meet the increasing demand of Coca-Cola products³³. This type of initiatives, demonstrate a solid presence of this manufacturer, which increases the barriers to enter the Colombian market for Logoplaste.

Companies like Danone, one of Logoplaste's major clients, opted to enter the Colombian market through a joint-venture with Alqueria³⁴, a leading dairy company in Colombia with more than 50 years of existence, in order to cooperate in the production as well as the distribution of dairy products. By doing so, Danone aims to increase its position within the dairy market in Latin America, taking advantage of Alqueria's well established position, however Danone becomes highly reliant on this company, which then again can make it harder for a company like Logoplaste to step in.

Nonetheless, I believe it is important to underline that these big FMCG companies, typically don't have exclusivity contracts and tend to acquire their various product packages from different suppliers as a way to diversify their risk. Therefore, Logoplaste may be able to spot certain opportunities, especially next to companies it has acquired a solid knowledge of, as a result of previously established partnerships in other countries.

New entrants

Another important force is the threat of new entrants, which analyzes the likability of a new competitor entering the market. With regards to this aspect, we experience once again opposing forces. On the one side we are looking at the plastic market, a market which has been growing a lot and is expected to stick to this positive growth trend, and therefore is likely to attract new companies. Additionally, the government has tried to attract foreign investment by promoting a series of initiatives and reforms as well as reinforced the trade agreements, which then again encourage the entrance of new

³³http://www.elempaque.com/ee/secciones/EE/ES/MAIN/N/NOTICIAS3/doc_94300_HTML.html?idDocumento=94300

³⁴ <http://www.reuters.com/article/2007/02/26/danone-colombia-idUSPAC00774720070226>



competitors. However, on the other side this market is a very price-competitive one which means that once existing big players have achieved economies of scale it will be extremely difficult for a new entrant to compete with them. Moreover, a manufacturing business needs the set-up of a factory which demands for large capital investments, requiring a strong banking system (with access to credit).

SWOT Analysis

Strengths

The long-term contracts celebrated between Logoplaste and its clients will be particularly valuable since Colombia is expected to keep growing during the upcoming years, therefore both parties would be able to take advantage of these growth opportunities. On the other hand, the fact that Logoplaste's business model establishes the set-up of single-client plant, decreases the overall risk involved with the investment because the company will only enter Colombia if it has already a partner. Ultimately, the overall positive economic environment Colombia is going through has encouraged higher levels of consumption. Meaning that consumers may be willing to spend more in higher-end products, which would be beneficial for Logoplaste as a manufacturer of packages in this segment.

Weaknesses

The major weakness that comes to my mind when analyzing Logoplaste is related to the high reliability this company places on an existing standard of trust with its current clients. However, when considering the possibility of entering a new market the company may fail to adjust its model and ignore differences in clients (in particular if dealing with local companies) and within the culture. For instance, the notion of a contract in Colombia may be slightly different to what Logoplaste is accustomed to in other countries. Thus, the major weakness I see for Logoplaste is a potential lack of knowledge on the Colombian market and an excessive reliability on "best practices" that may have worked in other countries, ignoring the macro context it is inserted in.

Opportunities

The major opportunities I would highlight for Logoplaste are: the overall positive economic prospect of the country which encourages higher levels of consumption; the verified and expected growth of the plastic industry in Colombia, as I mentioned above; Colombia's geographic position which will enable fast delivery to key markets (e.g. U.S.); and the ease of negotiation due to cultural similarities with Portuguese people.



Moreover, although the legal framework doesn't require it, I believe Logoplaste could benefit from partnerships with Colombian companies, becoming easier to penetrate successfully this market.

Threats

The major threats Logoplaste faces are: the increasing importance and popularity of flexible packaging, especially within the context of a population which gives little importance to product design and is rather worried with guaranteeing high quality products at lower prices and preserving the environment³⁵; the growth of the plastic packaging industry itself which may be affected by the development of new types of resins and more cost-effective transformation methodologies that could reduce plastic consumption; and potential increases in oil prices that could limit the feedstock availability for future plastic production and affect resin producers' margins³⁶.

Furthermore, it is unquestionable that Logoplaste will have to face existing fierce competitors within the rigid plastic packaging segment: *Mexichem*; *Grupo Phoenix*; *Carvajal Empaques*; and *Amtor* (with a special concern over *Carvajal Empaques* due to what was said previously).

Moreover, oppositely to what would be predictable, Logoplaste's ILab which is a main source of competitive advantage for the company, may be hard to be established in a country like Colombia. Although property rights are generally respected, infringement of intellectual property rights is quite common³⁷. Therefore the overall idea of the ILab as a sustainable competitive advantage is questioned, since it demands for a strong protection over intellectual property.

Furthermore, Colombia's inadequate and insufficient infrastructures may limit the growth potential of the country's economy³⁸ and indirectly affect Logoplaste.

Implementation

Starting a new project

As it was easily perceived after the analysis done, the rigid plastic packaging industry in Colombia is quite competitive with well-established players. However, Logoplaste must keep its eyes-open for any opportunity that may emerge: FMCG companies may reach a

³⁵ <http://www.euromonitor.com/packaging-industry-in-colombia/report>

³⁶ <http://www.icis.com/Articles/2012/10/02/9600517/colombia-plastic-packaging-recovers-after-2009-slump.html>

³⁷ <http://www.heritage.org/index/country/colombia>

³⁸ <https://economics.rabobank.com/publications/2013/june/country-report-colombia/>



certain volume that justifies local production or the change from a multi-client plant to a single-plant; a stabilized demand may also justify the implementation of a *hole-in-the-wall* plant; and ultimately, if a FMCG company isn't satisfied with the packages being produced by their existing manufacturers (e.g. quality standards not being met) they may feel encouraged to change to a different packaging supplier. Consequently, if an opportunity is spotted, Logoplaste must get immediately into action.

Typically, a new plant in a new location is traduced into a minimum investment of 5-10 million euros and takes about 1 year – 1.5 years to be fully set-up. Nonetheless, it is important to keep in mind that Logoplaste has a relative lower risk involved than some of its competitors due to the adoption of a *hole-in-the-wall* business model which significantly approximates the company to its clients (typically big and strong players within the FMCG industry). Thus, by having their plants next to the clients' infrastructure, the company is able to reduce the risk when compared to small regional players or to multinational players that adopt an off-site production model.

Then, it is necessary to gather the central technical teams which will locally be responsible for various activities, namely: for the supervision of the construction and the supervision of the arrival of the equipment; for the recruitment of the local teams (comprising the head of the plant and the head of maintenance, among other which are essential for the correct-functioning of the plant and that require training); for the plant assembly; for the hire of local service provides like the partner responsible for the accountability; and the search of local suppliers for minor raw materials . This whole phase of "implementation" lasts around 6 months and is followed by a 2-3 months phase of project qualifications, when the plant starts working but not yet at its full speed. It is during this phase that the company carries out minor adjustments comprising the machines, the final product, and the number of employees according to the clients' needs. Ultimately, after these phases, the plant should start producing at its full capacity, at the so-called "cruse speed".

Below I show a table with all the average costs involved when setting a new plant, to get a more concrete idea of the necessary investment (source: Logoplaste).



COSTS

Main Machines	6.322.000
Moulds	920.000
Installation	697.500
Transformer	
Electrical Switchboards	
Electrical Network	
Water and Air Piping	
Equipment for H&S Requirements	
Quality lab furniture and equipment	
Tools / workshop / warehouse	
Office furniture and computer systems	
Others	204.200
Transports (CIF)	
Insurance (unload, install & startup)	
Unforeseen Project Costs	
Machines Main Equipment	765.000
Secondary Equipment	183.000
RM Main Dosing Units	
RM Silos	
Secondary Grinders and Conveyors	
Schredder	
Secondary Neck Trimmers	
Secondary Leak Testers	
Peripherals	597.000
Air Conditioner/Ventilation System	
Air Conditioner Chiller	
Air Conditioner Air Blast Cooler	
L.P. Compressor+Dryer+Air Receiver	
Air Blast Coolers	
Mould Chillers	
Pumps Sets+Control Panel	
Storage	2.047.500
Conveyors System	
Bottle Silos	
Unscrambler	
Palletizers	
Automatic Warehouse	
Packaging	150.000
Fork lift	
Shrink Wrapper	
TOTAL INVESTMENT	11.886.200

Conclusion

Having traced a solid path of worldwide expansion, I felt it would be interesting to explore the possibility of entering a new and totally different market: Colombia. Colombia has been recently attracting a lot of Portuguese investment and is globally considered a friendly country to invest in. As I mentioned throughout my project, Colombian's are an easy population to make business with, in some aspects quite similar to Portuguese, and the government offers several benefits to foreign investors



which may be extremely appealing. Additionally, the country has been improving a lot economically, the population has seen massive improvements in their purchasing power and in terms of security, having decreased drug traffic. Therefore, I believe that culturally and economically this may be an excellent opportunity for Logoplaste along with all the other reasons I have been pointing out.

However, there is one aspect, I feel that may seriously jeopardize Logoplaste's success within the Colombian market: the fact that the majority of its partners have already well-established positions within this market, alongside other packaging manufacturers. Nonetheless, if Logoplaste manages to spot certain opportunities, namely an existing unsatisfied FMCG company or an increasing demand of a certain product which may justify a single-client plant, this may be an incredible chance for Logoplaste to increase its power within Latin America.



PRIMARY APPENDICES

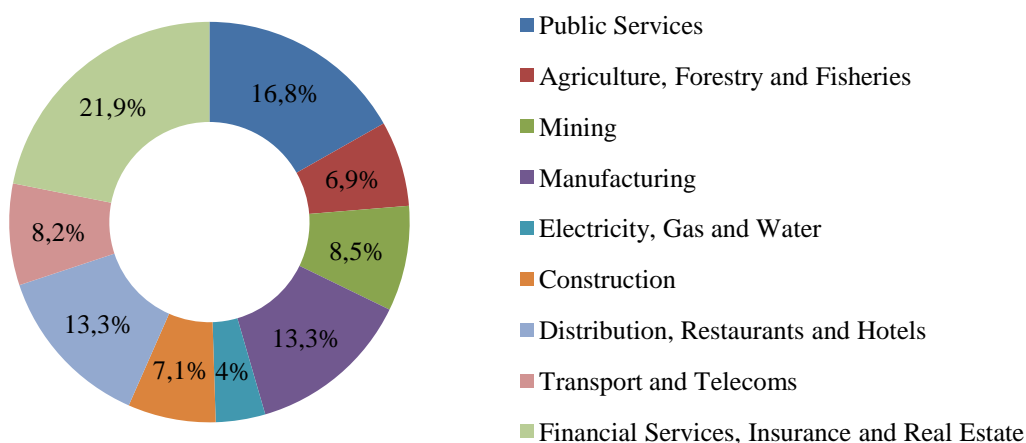
Appendix 1.1: Logoplaste's Value Chain



Appendix 1.2: CAGE Analysis

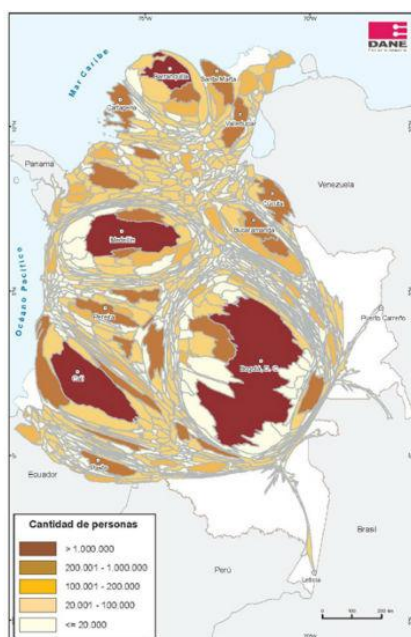
Turkey is obviously the closest country geographically not only physically (3237 km) but also due to the similar time zone, which encourages businesses to happen since communication is facilitated. From a more administrative perspective this country seems to also take advantage over the other ones in analysis, first of all because it has a closer legal system to the Portuguese one once both derive from the French constitution and secondly it is the country that presents the smallest difference in terms of corruption. Additionally, Turkey is part of the G-20 and is nowadays attempting to enter the European Union, something that would approximate a lot Turkey to Portugal (e.g. Maastricht criteria verified and consequently common currency). Moreover, this country is of a large geopolitical strategic importance since it is located in two continents and borders with eight countries; and some of Logoplaste's most important clients are already present in this market (e.g. Nestlé and Unilever). The major drawbacks are related to the large differences with regards to culture, since language is completely different as well as religion and this country borders extremely problematic regions like Iraq and Syria.

Appendix 1.3: Break-Down of Colombia's 2012 GDP by Sector – Bes Research

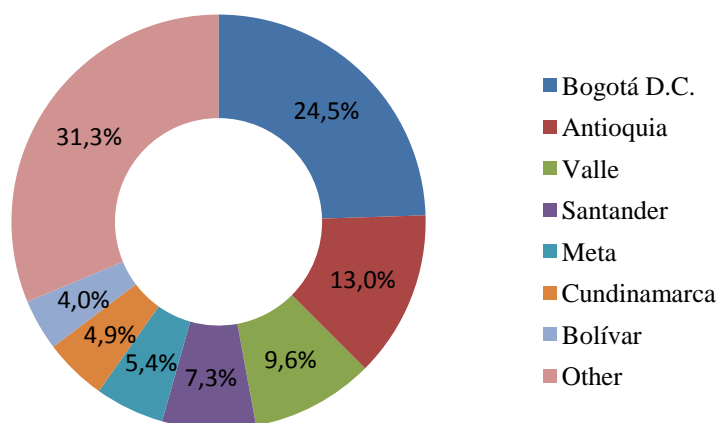




Appendix 1.4: Colombia's 2005 Cartogram – Source: DANE



Appendix 1.5: Break-Down of Colombia's 2011 GDP by State – Bes Research





SECONDARY APPENDICES

Appendix 2.1: Value Chain

The value chain describes the full range of activities performed by firms and workers with the ultimate objective of bringing a product from its conception to its end use. However, it is important to be aware that these activities do not have to be performed entirely by a single firm, quite on the contrary we have been assisting to a shift from strongly vertically integrated companies towards companies that attempt to divide these multiple activities across various different firms.

Porter's Generic Value Chain

Primary activities are “activities involved in the physical creation of the product and its sale and transfer to the buyer as well as after-sale assistance”.¹ These can then be organized into 5 generic categories involved in competing in any industry:

- The Inbound Logistics encompass all activities associated with receiving, storing, and disseminating inputs to the product.
- Operations comprise all the activities associated with transforming inputs into the final product form.
- Outbound Logistics incorporate all the activities associated with collecting, storing, and physically distributing the product to buyers.
- Marketing and Sales concentrate all activities associated with providing a means by which clients can purchase the product and inducing them to do so.
- Service embraces all the after sales activities which aim to enhance or maintain the value of the product.

Support activities are defined by Porter as the activities that “support the primary activities and each other by providing purchased inputs, technology, human resources, and various firmwide functions”.¹ These can also be divided into 4 generic categories:

- Procurement corresponds to the function of purchasing inputs such as raw materials, supplies, and other consumable items as well as assets such as machinery, laboratory equipment, office equipment, and buildings.

¹ Porter, Michael E. *Competitive Advantage: Creating and Sustaining Superior Performance*. New York: Free, 1985



- Technology Development, this always plays a crucial role since the company is constantly concentrating its efforts to improve the product (the packages themselves) and the process of their clients.
- Human Resource Management (HRM), involves all activities related to recruiting, hiring, training, development, and compensation of all types of personnel.
- Firm Infrastructure includes activities ranging from general management, planning, finance, accounting, legal, government affairs, all the way to quality management.

Appendix 2.2: Forums

As I mentioned, Logoplaste attempts to organize forums: regional forums every three months which bring together the heads of plants from various regions, with the objective of exchanging good practices related to maintenance and quality; and a yearly global technical forum with the aim of sharing know-how. On a more regular basis, the managing directors gather together with the boarding directors every month with the objective of exchanging operational and technical information.

Appendix 2.3: CAGE Model

The CAGE framework not only helps to identify the key differences in particular settings; it also offers insights into differences in differences by providing a basis for distinguishing countries that are relatively close, along the key dimensions, from those that are relatively far.

Before setting up a business in any given country it is important that a company carries out a set of different studies around that specific country. However, most frameworks used for country analysis fail to account for all the effects of distance. These tend to focus solely on the unilateral attributes of countries or multilateral (measures distance between a country and the rest of the world) and to miss out on bilateral measures (specific to particular country-pairs) of distance¹⁶. Thus, the CAGE framework emerges as an important tool which adds bilateral measures of distance in its country analysis.



Cultural Distance

Culture applied within this framework “refers to the attributes of a society that are sustained mainly by interactions among people, rather than by the state”². Typically, the larger the cultural differences across countries, the fewer the economic interactions between them. Within this dimension, Language is the most obvious cultural difference. Nevertheless there are many other cultural factors which reduce economic exchange, namely differences in “ethnicity and religion, lack of trust, and variations in egalitarianism (defined as societal intolerance for abuses of market and political power)”².

In addition to bilateral attributes that take the form of cultural differences, cross-border economic activity may also be affected by unilateral cultural attributes. Hence, it is intuitive that nations with traditional and narrow-minded cultures tend to isolate themselves, by being relatively less opened to international trade and investment.

Administrative Distance

“Administrative attributes encompass laws, policies, and institutions that typically emerge from a political process and are mandated or enforced by governments”². This category includes as well the international relationships established between countries, comprising agreements and international organizations.

Administrative or political attributes that affect this cross-border economic activity which I have been talking about encompass things like: colonial ties, membership in the same regional trading bloc, use of a common currency, and differences in the level of corruption.

Geographic Distance

Geographic distance goes beyond the physical distance between two countries. There are other components that must be taken into account when we think of geographic distance, namely, the “presence or absence of a common land border, differences in time zones and climates, and, in unilateral terms, access to the ocean, topography, and within-country distances to borders”².

Economic Distance

Economic distance refers to differences that affect cross-border economic activity through economic mechanisms that differ from the cultural, administrative, and

² GHEMAWAT, Pankaj. *Redefining Global Strategy: Crossing Borders in a World Where Differences Still Matter*, Harvard Business School Press, Boston 2007.



geographic ones already mentioned, for example: economic size, per capita income, factors of production the country holds, and level of poverty verified

Appendix 2.4: CAGE Analysis

Peru had a brilliant macroeconomic performance in the last decade due to significant structural reforms. These reforms were able to promote a significant increase of the FDI, which is key to achieve a sustainable economic growth. In 2012 the GDP growth was around 6,3% and the inflation rate decreased to 3,7% ³. Additionally, the GDP per capita triple in the first decade of this century. However, this country faces some problems, namely the lack of development of its bank system and the exaggerated concentration of the economic activity in the state of Lima (46% of the GDP).

Indonesia ranked the most different country out of the four, being its legal system the only common point with Portugal. Moreover, this country is constituted by 17508 islands which complicates the overall distribution structure; it has more than 300 ethnic groups and 742 languages/dialects which makes communication a very hard barrier to overcome; and it doesn't have an appropriate logistic system which harms the competitiveness of the country.

Appendix 2.5: PESTLE - Political

For instance, the authorities are keeping their eyes open to the potential reappearance of drug-funded organized criminal groups and are concentrating efforts to avoid so. Additionally, the president has carried out measures which attempt to re-establish the balance between the government's branches and strengthen the country's democratic institutions⁴.

Appendix 2.6: PESTLE – Economic: Trade Agreements

Namely, a free trade agreement between Colombia and the United States was approved by the US Congress during October 2011, to be implemented in 2012. Furthermore, Colombia has signed or is negotiating free trade agreements with various other countries, comprising Canada, Chile, Mexico, Switzerland, the European Union, Venezuela, South Korea, Turkey, Japan and Israel⁵.

³ Bes Research (2013), Peru - International Support Kit of Opportunities [pdf slides], Retrieved from <http://www.bes.pt/sitebes/cms.aspx?plg=f587ccea-1a90-4c08-b841-e096f6b9105b>

⁴ <http://colombiareports.co/colombia-the-only-risk-for-investors-is-social-unrest/>

⁵ Bes Research (2013), Colombia - International Support Kit of Opportunities [pdf slides], Retrieved from <http://www.bes.pt/sitebes/cms.aspx?plg=a64af9b4-49c8-42af-9a9b-6df06a5ec2f4>



Appendix 2.7: PESTLE - Social

Among the physical factors affecting the spatial distribution of the population, we may include: climate, soil quality, types of landscape, and the available natural resources in a certain region which will either encourage or reduce the development of human activities. For instance, the cooler and more temperate climates attracted the population towards the plateaus and the medium valleys of the three ridges, especially the Central and the Eastern one. These areas had extremely fertile soils of volcanic origin which enabled agriculture. Across the coastline, there is also a high concentration of the population which is linked to economic activities such as trade and agricultural production.

In addition there are many social factors which influence the way the population is spread across the territory: the lasting armed conflict, the existing insecurity and the lack of opportunities forced people to abandon the rural areas, and move to the urban areas. This resulted in an incredible growth of the urban areas, especially of the bigger cities, in many cases exacerbating the settlement of precarious conditions.

Appendix 2.8: Porter's 5 forces - Competitors

- *Mexichen*: a Mexican manufacturer of PVC, chlorine derivatives and soda, which owns plants in Bogota and Cartagena, making it responsible for supplying not only the Colombian market but also countries like Bolivia, Peru, Ecuador, Argentina, Chile and Venezuela;
- *Grupo Phoenix*: an American company, with production plants in Colombia, the US, Mexico and Venezuela, which intends to deliver comprehensive solutions for packaging containers;
- *Carvajal Empaques*: a Colombian rigid and foam plastic packaging producer within the consumer goods industry. This company operates in the exact same segments as Logoplaste and it has been in the industry for many years. Furthermore its presence in the American continent goes beyond Colombia, holding plants as well in Mexico, Peru, Chile, and in El Salvador. Besides all these factors which make it already a serious rival, the company has solid relationships with companies like Johnson & Johnson, Nestlé, Reckitt Benckiser, Unilever, Henkel, and P&G, all part of Logoplaste's array of partners. With less know-how of the Colombian market, operating in an industry



with little differentiation power, it will be definitely challenging for Logoplaste to penetrate this new market.

- *Amcor*: an Australian manufacturer, holding four production plants in Colombia, which is in charge of producing packaging materials for the food, beverages and pharmaceutical industry as well as medical equipment and industrial applications⁶

Appendix 2.9: Porter's 5 forces - Threat of substitutes

Flexo Spring: Colombian company which offers flexible packaging solutions, not only to Colombia but also to Ecuador, Venezuela and Panama.

Plastilene: a flexible packaging provider which has been serving Latin America for over 50 years, being a leader within its segment⁶.

Appendix 2.10: TOWS analysis

With regards to implementation, I considered a TOWS analysis as the first step. Contrary to what many think a TOWS analysis, although it involves listing strengths, weaknesses, opportunities and threats like a SWOT analysis, it consists in listing these four items but in the reverse way. Thus, the macroeconomic environment is first analyzed with the objective of finding ways for the company to benefit from the various existing opportunities and to minimize threats by leveraging on its strengths and overcoming its weaknesses. By carrying out this type of analysis, companies avoid getting stuck in abstract discussions about the company and actually end up with productive discussions about the macro-environment, emphasizing the sense of problem-solving which is crucial for an appropriate strategy formulation.

Basically what I wanted to do was to grab the previously done SWOT analysis and try to find ways to minimize the existing threats and to transform potential weaknesses in opportunities/strengths. The major weakness I pointed out, was Logoplaste's high dependence on a certain standard of trust with its clients which could be questioned when entering a new market, with a total different culture. The company could be led to enter the Colombian market without a deeply enough analysis on the country and end up making many mistakes otherwise easily avoidable. Nevertheless, this weakness may be bypassed, if Logoplaste is aware of such risk and therefore carries out the necessary meticulous analysis of the country (e.g. on the culture, the industrial propriety), gathering the required know-how on Colombia. Typically, this type of exhaustive

⁶ <http://en.investinbogota.org/plastics>



analysis on a certain country can even enhance the discovery of opportunities that would otherwise be ignored.

With regards to the threats faced by Logoplaste in Colombia, I believe this company can easily transform them into opportunities if it acquires a solid know-how of the country and its population, and tackles the right topics from the very beginning. Being Colombians, people extremely worried about the environment and little worried about package design, Logoplaste can invest all its resources in developing environmental-friendly and “ignore” the aesthetics of the package. By doing so Logoplaste isn’t necessary increasing expenses, perhaps it is simply managing its resources in a different way, in a way which meets better the Colombians’ desires and needs.

Additionally, I think it would be interesting for Logoplaste to study with some detail the possibility of starting to produce flexible plastic packages in order to assess the potential profitability of such initiative. This segment is in serious expansion, especially in markets like the Colombian one, because on the one hand it is cheaper to produce and on the other hand it has a less negative impact on the environment. Thus, an alternative like this one will meet end-consumers needs better by providing them with a less costly alternative (being price something they truly value when purchasing) while being a more environment-friendly one.

Ultimately, I believe that a strong knowledge on the country and its population, may be enough for Logoplaste to leverage on its resources and develop superior packaging-solutions adjusted to the exact market’s needs, and this way surpass its existing competitors.